Response Under 37 CFR § 1.116
Expedited Procedure – Group Art Unit 2665
US Patent Application No. 09/687,881
Response to Final Office Action of August 18, 2006

Atty Docket No. 10661RRUS02 (22171.162)
Customer No. 27683

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method for supporting a handoff of a mobile node from a first agent of a first network to a second agent of a second network, the method comprising the steps of:

upon initiation of the handoff, sending a first message to the first agent requesting the first agent to buffer at the first agent all [[any]] packets being sent to the mobile node;

completing the handoff to the second agent; and

responsive to the completing, sending a second message to the first agent requesting the first agent to forward the [[buffered]] packets buffered at the first agent to the second agent.

2.   (Original) The method of claim 1 wherein the first message is part of a registration request protocol to the second agent.

3.   (Original) The method of claim 2 wherein the second message is also part of the registration request protocol, occurring after the second agent has been authorized.

4.   (Original) The method of claim 1 wherein the first and second networks are mobile internet protocol networks.

5.   (Original) The method of claim 4 wherein the second agent is a foreign agent to the mobile node.

6.   (Original) The method of claim 1 wherein the mobile node sends the first message to the first agent.

7.   (Currently Amended) A method for supporting a handoff of a mobile node from a first agent of a first network to a second agent of a second network, the method comprising the steps of:

upon initiation of the handoff, the second agent sending a first message to the first agent requesting the first agent to buffer at the first agent any packets being sent to the mobile node;

completing the handoff of the mobile node to the second agent; [[and]]

responsive to the completing, sending a second message to the first agent requesting the first agent to forward the [[buffered packets]] buffered at the first agent to the second agent.

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8.　　(Currently Amended)　A ~~software program~~ computer program product for facilitating a handoff of a mobile node from a first agent to a second agent, the ~~software program~~ computer program product stored on a computer-readable medium and comprising computer-executable [[comprising]] instructions for:

　　　　determining that the handoff is to be initiated;

　　　　before a transmission of a handoff request message, sending a first message to the first agent requesting the first agent to buffer at the first agent any packets being sent to the mobile node;

　　　　completing the handoff to the second agent; and

　　　　responsive to the completing, signaling the first agent to forward the [[buffered]] packets buffered at the first agent to the second agent.

9.　　(Currently Amended)　The ~~software program~~ computer program product of claim 8 wherein the first message is part of a registration request protocol to the second agent.

10.　　(Currently Amended)　The ~~software program~~ computer program product of claim 9 wherein the second message is also part of the registration request protocol, occurring after the second agent has been authorized.

11.　　(Currently Amended)　The ~~software program~~ computer program product of claim 8 wherein the first and second networks are mobile internet protocol (IP) networks.

12.　　(Currently Amended)　The ~~software program~~ computer program product of claim 11 wherein the second agent is a foreign agent to the mobile node.

13.　　(Currently Amended)　The ~~software program~~ computer program product of claim 8 wherein the second agent sends the first message to the first agent.

14.　　(Currently Amended)　The ~~software program~~ computer program product of claim 8 further comprising computer-executable instructions for sending, by the mobile node, a buffer control request.

15.　　(Currently Amended)　The ~~software program~~ computer program product of claim 15 further comprising computer-executable instructions for sending an indicator to the second agent that the mobile node has requested buffering.

16.   (Currently Amended) The ~~software program~~ computer program product of claim 8 wherein the first message includes an indicator of a buffer size.

17.   (Currently Amended) The ~~software program~~ computer program product of claim 8 further comprising computer-executable instructions for:

discarding, by the first agent, predetermined packets when a maximum number of packets have been received.

18.   (Currently Amended) The ~~software program~~ computer program product of claim 8 further comprising computer-executable instructions for:

signaling the first agent to delete the buffered packets.

19.   (Currently Amended) The ~~software program~~ computer program product of claim 18 further comprising computer-executable instructions for:

signaling forwarding any packets received after the buffered packets are deleted.

20.   (Currently Amended) The ~~software program~~ computer program product of claim 8 wherein the first message includes an indicator of a maximum length of time that buffering is needed.

21.   (Currently Amended) The ~~software program~~ computer program product of claim 8 wherein the first message includes an indicator of authenticity for the buffering.

22.   (Currently Amended) The ~~software program~~ computer program product of claim 11 wherein the first message includes an IP filter to identify certain packets that do not need to be buffered.

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23.   (Currently Amended) A ~~software program~~ computer program product for a new agent of a new network to initiate communication with a mobile node, the ~~software program~~ computer program product stored on a computer-readable medium and comprising computer-executable [[comprising]] instructions for:

determining that the mobile node is in handoff;

sending a first message to the old agent requesting the old agent to buffer at the old agent any packets being sent to the mobile node;

completing the handoff of the mobile node; and

responsive to the completing, signaling the old agent to forward the [[buffered]] packets buffered at the old agent to the new agent.

24.   (Currently Amended) The ~~software program~~ computer program product of claim 23 wherein the old and new networks are mobile internet protocol networks.

25.   (Currently Amended) The ~~software program~~ computer program product of claim 23 wherein the new agent is a foreign agent to the mobile node.

26.   (Currently Amended) The ~~software program~~ computer program product of claim 23 wherein the first message is sent by the mobile node.

27.   (Currently Amended) The ~~software program~~ computer program product of claim 23 wherein the new agent sends the first message to the old agent.

28.   (Currently Amended) A system for supporting a handoff of a mobile node from a first agent of a first network to a second agent of a second network ,the system comprising:

means for sending, before a transmission of a handoff request message, a first message to the first agent requesting the first agent to buffer at the first agent any packets being sent to the mobile node;

means for completing the handoff to the second agent; and

means responsive to completing the handoff for sending a second message to the first agent requesting the first agent to forward the [[buffered]] packets buffered at the first agent to the second agent.

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29.   (Previously Presented) The method of Claim 7 wherein the first message is part of a registration request protocol to the second agent.

30.   (Previously Presented) The method of Claim 29 wherein the second message is also part of the registration request protocol, occurring after the second agent has been authorized.

31.   (Currently Amended) A ~~software program~~ computer program product for facilitating a handoff of a mobile node from a first agent to a second agent, the ~~software program~~ computer program product stored on a computer-readable medium and comprising computer-executable [[comprising]] instructions for:

determining that the handoff is to be initiated;

the second agent sending a first message to the first agent requesting the first agent to buffer at the first agent any packets being sent to the mobile node;

completing the handoff to the second agent; and

responsive to the completing, signaling the first agent to forward the [[buffered]] packets buffered at the first agent to the second agent.

32.   (Currently Amended) The ~~software program~~ computer program product of Claim 31 wherein the first message is part of a registration request protocol to the second agent.

33.   (Currently Amended) The ~~software program~~ computer program product of Claim 32 wherein the second message is also part of the registration request protocol, occurring after the second agent has been authorized.